AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) The reactivation circuit as claimed in ~~claim 1~~ Claim 5, wherein:

the storage element coupled in parallel with a load such that the voltage across the storage element is substantially equal to a voltage across the load.

3. (Currently Amended) The reactivation circuit as claimed in ~~claim~~ Claim 2, wherein:

the storage element includes a capacitance.

4. (Cancelled)

5. (Currently Amended) A reactivation circuit coupled with a system having a protection mechanism which prevents runaway current, the reactivation circuit comprising:

a charging circuit coupled with a storage element, the charging circuit configured to supply a charging current to the storage element once the protection mechanism is activated to prevent the supplying of the output current;

a monitoring circuit coupled with the system, the storage element, and the charging circuit, the monitoring circuit configured to monitor the voltage across the storage element and to signal the system when voltage across the storage element exceeds a predefined threshold and further configured to deactivate the charging circuit when the voltage across the storage element exceeds the predefined threshold; and~~The reactivation circuit as claimed in claim 4, further comprising:~~

a latch coupled between the monitoring circuit and both the charging circuit and the system, configured to receive a signal from the monitoring circuit, ~~; and~~

the latch further configured to maintain the charging circuit in at least a deactivated state as signaled by the monitoring circuit.

6 -13. (Cancelled)

14. (Currently Amended) A system configured to supply an output current to a load and having shutdown protection, the system comprising:

a shutdown signal configured to signal the system to stop supplying the load with the output current;

a first monitoring circuit coupled with the load, the monitoring circuit configured to monitor an output voltage across the load and to signal the system to again supply the output current to the load when the output voltage exceeds a predefined voltage threshold; ~~The system as claimed in claim 13, further comprising:~~

a charging circuit coupled with the shutdown signal and the load, the charging circuit configured to supply the load with a charging current when signaled by the shutdown signal; and

a latch coupled between the first monitoring circuit and the charging circuit; ~~and~~

the latch configured to maintain the charging circuit in a deactivated and active state as signaled by the first monitoring circuit.

15. (Currently Amended) A system configured to supply an output current to a load and having shutdown protection, the system comprising:

a shutdown signal configured to signal the system to stop supplying the load with the output current;

a first monitoring circuit coupled with the load, the monitoring circuit configured to monitor an output voltage across the load and to signal the system to again supply the output current to the load when the output voltage exceeds a predefined voltage threshold;

a charging circuit coupled with the shutdown signal and the load, the charging circuit configured to supply the load with a charging current when signaled by the shutdown signal; and ~~The system as claimed in claim 13, further comprising:~~

a latch further coupled between the shutdown signal and the charging circuit, ; ~~and~~

the latch configured to maintain the charging circuit in an active or deactivated state as signaled by the shutdown signal.

16. (Currently Amended) The system as claimed in Claim~~claim~~ 15, wherein:

the latch is further configured to maintain the charging circuit in the active state to supply

one of a plurality of charging currents such that each one of the plurality of charging current has a different predefined current level.

17. (Currently Amended) The system as claimed in ~~claim 13~~ Claim 14, wherein:
the load includes at least a capacitive load configured to receive the charging current.

18. (Currently Amended) The system as claimed in ~~claim~~ Claim 17, wherein:
the capacitive load is configured to receive the charging current when a short circuit across the load has been removed.

19. (Currently Amended) A system configured to supply an output current to a load and having shutdown protection, the system comprising:

a shutdown signal configured to signal the system to stop supplying the load with the output current;

a first monitoring circuit coupled with the load, the monitoring circuit configured to monitor an output voltage across the load and to signal the system to again supply the output current to the load when the output voltage exceeds a predefined voltage threshold;

a charging circuit coupled with the shutdown signal and the load, the charging circuit configured to supply the load with a charging current when signaled by the shutdown signal; and~~The system as claimed in claim 13, further comprising:~~

a second monitoring circuit coupled with the shutdown signal and the charging circuit, the second monitoring circuit configured to monitor the shutdown signal and to signal the charging circuit when the shutdown signal transitions from a first state to a second state.

20. (Currently Amended) The system as claimed in ~~claim~~ Claim 19, wherein:
the first monitoring circuit includes at least a first edge detector configured to detect a transition of the output voltage when the output voltage is at least equal to the predefined threshold voltage.

21. (Currently Amended) The system as claimed in ~~claim~~ Claim 20, wherein:
the second monitoring circuit includes at least a second edge detector configured to detect a transition of the shutdown signal signaling the system temperature is at least equal to the predefined temperature threshold.

22. (Currently Amended) The system as claimed in ~~claim 12~~ Claim 14, further comprising:

a driving circuit coupled with the load, and configured to supply the load with the output current.

23. (Currently Amended) The system as claimed in ~~claim~~ Claim 22, wherein:

the driving circuit includes at least one switch having at least a first and second state, such that the driving circuit delivers the output current to the load when the switch is in the first state and the driving circuit is prevented from delivering the output current to the load when the switch is in the second state.

24. (Currently Amended) The system as claimed in ~~claim~~ Claim 22, wherein:

the driving circuit includes at least a first transistor coupled with a second transistor;

the first transistor further coupled with the first monitoring circuit such that the first monitoring circuit signals the first transistor to toggle from a first state to a second state; and

the first transistor configured to toggle the second transistor to a third state when first transistor is toggled to the second state and to toggle the second transistor to a fourth state when the first transistor is toggled to the first state such that the driving circuit conducts the output current to the load when second transistor is in the third state and the driving circuit does not conduct the output current to the load when the second transistor is in the fourth state.

25. (Currently Amended) The system as claimed in ~~claim~~ Claim 22, wherein:

not activating the driving circuit until a system temperature is at least equal to a lower predefined temperature.

26-29. (Cancelled)

30. (Currently Amended) The method as claimed in ~~claim 29~~ Claim 36, wherein:

the ~~step~~ act of supplying the storage element with the charging current wherein the storage element includes a capacitance and the charge current is supplied to the capacitance.

31. (Currently Amended) The method as claimed in ~~claim 29~~ Claim 36, further comprising ~~the steps of~~:

halting the supply of the charging current when the output voltage is at least equal to the predefined voltage threshold.

32. (Currently Amended) The method as claimed in ~~claim 29~~ Claim 36, further comprising ~~the steps of~~:

supplying a load with an output current prior to the step of receiving a shutdown signal; and

halting the supply of the output current to the load following the step of receiving a shutdown signal.

33 – 35. (Cancelled)

36. (Currently Amended) A method of reactivating a system following deactivation due to runaway current, comprising:

receiving a shutdown signal;

deactivating a driving circuit configured to supply an output current to a load after receiving the shutdown signal;

supplying a charging current to a storage element;

monitoring a voltage across the storage element

reactivating the system when the voltage across the storage element is at least equal to a predefined voltage threshold; and

maintaining the driving circuit in a deactivated state and maintaining the charging circuit in an active state ~~The method as claimed in claim 35, wherein:~~

~~the step of maintaining the driving circuit and the charging circuit~~ including latching the driving circuit in the deactivated state and the charging circuit in an active state, until the voltage across the storage element is at least equal to the predefined threshold voltage.

37 – 40. (Cancelled)

41. (New) The system as claimed in Claim 15, wherein:

the load includes at least a capacitive load configured to receive the charging current.

42. (New) The system as claimed in Claim 41, wherein:

the capacitive load is configured to receive the charging current when a short circuit across the load has been removed.

43. (New) The system as claimed in Claim 15, further comprising:

a driving circuit coupled with the load, and configured to supply the load with the output current.

44. (New) The system as claimed in Claim 43, wherein:

the driving circuit includes at least one switch having at least a first and second state, such that the driving circuit delivers the output current to the load when the switch is in the first state and the driving circuit is prevented from delivering the output current to the load when the switch is in the second state.

45. (New) The system as claimed in Claim 43, wherein:

the driving circuit includes at least a first transistor coupled with a second transistor;

the first transistor further coupled with the first monitoring circuit such that the first monitoring circuit signals the first transistor to toggle from a first state to a second state; and

the first transistor configured to toggle the second transistor to a third state when first transistor is toggled to the second state and to toggle the second transistor to a fourth state when the first transistor is toggled to the first state such that the driving circuit conducts the output current to the load when second transistor is in the third state and the driving circuit does not conduct the output current to the load when the second transistor is in the fourth state.

46. (New) The system as claimed in Claim 43, wherein:

not activating the driving circuit until a system temperature is at least equal to a lower predefined temperature.

47. (New) The system as claimed in Claim 19, further comprising:

a driving circuit coupled with the load, and configured to supply the load with the output current.

48. (New) The system as claimed in Claim 47, wherein:

the driving circuit includes at least one switch having at least a first and second state, such that the driving circuit delivers the output current to the load when the switch is in the first state and the driving circuit is prevented from delivering the output current to the load when the switch is in the second state.

49. (New) The system as claimed in Claim 47, wherein:

the driving circuit includes at least a first transistor coupled with a second transistor;

the first transistor further coupled with the first monitoring circuit such that the first monitoring circuit signals the first transistor to toggle from a first state to a second state; and

the first transistor configured to toggle the second transistor to a third state when first transistor is toggled to the second state and to toggle the second transistor to a fourth state when the first transistor is toggled to the first state such that the driving circuit conducts the output current to the load when second transistor is in the third state and the driving circuit does not conduct the output current to the load when the second transistor is in the fourth state.

50. (New) The system as claimed in Claim 47, wherein:

not activating the driving circuit until a system temperature is at least equal to a lower predefined temperature.